IN THE CLAIMS

1. (Cancelled).

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Cancelled).

7. (Cancelled).

8. (Cancelled).

9. (Cancelled).

10. (Cancelled).

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (Cancelled).

15. (Cancelled).

16. (Cancelled).

17. (Cancelled).

18. (Cancelled).

19. (Cancelled).

20. (Cancelled).

21. (Cancelled).

22. (Cancelled).

23. (Cancelled).

24. (Cancelled).

25. (Cancelled).

26. (Cancelled).

27. (Cancelled).

28. (Cancelled).

29. (Cancelled).

30. (Cancelled).

31. (Previously Presented) A time sensitive quality of service management system comprising:

a communication port for communicating information;

a switching circuit for providing an output communication path to said communication port and performing unscheduled cut through routing of a communication path probe, wherein said probe is discarded if said unscheduled cut through routing is not performed directly, said switching circuit coupled to said communication port;

a processor for directing said switching circuit to perform unscheduled cut through routing of a communication path probe and a communication path probe update, including discarding said communication path probe and associated

information if said unscheduled cut through routing of said probe is not performed directly, said processor coupled to said switching circuit; and

a memory for storing information associated with the control of said switching circuit by said processor, said memory coupled to said processor.

32. (Original) A time sensitive quality of service management system of Claim 31 wherein said processor analyzes incoming information and determines if the incoming information has time sensitive characteristics.

33. (Previously Presented) A time sensitive quality of service management system of Claim 32 wherein said processor directs said time sensitive quality of service management system to drop said incoming information with time sensitive characteristics if said switching circuit can not output said information within specified timing constraints according to said time sensitive characteristics.

34. (Original) A time sensitive quality of service management system of Claim 32 wherein said processor directs said time sensitive quality of service management system to drop said incoming information with time sensitive characteristics if said switching circuit is busy performing other switching operations.

35. (Original) A time sensitive quality of service management system of Claim 32 wherein said processor directs said switch to add identification information to said communication path probe and forward said communication path probe by cut-through routing upon receipt and analysis of destination information in said communication probe.

36. (Previously Presented) A time sensitive quality of service management system of Claim 32 wherein said processor directs said switch to forward said communication path probe update upon receipt and analysis of source information in said communication probe update.

37. (Original) A time sensitive quality of service management system of Claim 32 wherein said communication path probe update includes information utilized to establish a communication path from a source to a destination.

38. (Previously Presented) A time sensitive quality of service management system of Claim 32 wherein said communication path probe is broadcast to communicatively coupled neighboring intermediate network devices.

39. (Original) A time sensitive quality of service management system of Claim 32 wherein the information is considered urgent if it is addressed to a port associated with a time sensitive device.

40. (Cancelled).

41. (Cancelled).

42. (Cancelled).

43. (Cancelled).

44. (Cancelled).

45. (Cancelled).

46. (Cancelled).

47. (Cancelled).

48. (Cancelled).

49.(Cancelled).

50. (Currently Amended) A time sensitive quality of service management method comprising:

receiving information by an intermediate network device;

determining transmission timing constraints of said intermediate network device;

sending the information ~~to~~ via unscheduled pre-emptive cut through routing to downstream devices by the intermediate network device if the intermediate device is available for sending said information to downstream devices within specified timing constraints, wherein during the unscheduled pre-emptive cut through routing a communication path probe is forwarded to downstream channels as soon as the communication path probe is received and analyzed;

analyzing the timing constraints of the information by the intermediate network device; and

dropping said information if the intermediate device is not available for sending said information to downstream devices within specified timing constraints.

51. (Original) A time sensitive quality of service management method of claim 50 wherein said communication path probe includes information on the final destination and the communication path the probe has traveled.

52. (Original) A time sensitive quality of service management method of claim 51 further comprising the step of receiving a communication path probe update and forwarding said communication path probe update to upstream devices.

53. (Previously Presented) A time sensitive quality of service management method of claim 51 further comprising:

receiving time sensitive information intended for a final destination by an intermediate network device;

determining if an intermediate network device has communicated information along a first communication path that is included in a second communication path for time sensitive information intended for a final destination; and

communicating the information along the first communication path.

54. (Previously Presented) A time sensitive quality of service management method of claim 51 further comprising:

selecting a first communication link is in a first communication path; and

analyzing if the first communication link with the second intermediate network is available.

55. (Currently Amended) A network management system comprising:

a communication port for communicating information;

a switching circuit for providing an output communication path to said communication port and performing unscheduled pre-emptive cut through routing of information, wherein said information is discarded if said unscheduled cut through routing is not performed directly, said switching circuit coupled to said communication ~~por~~ port, said switching circuit coupled to said communication port;

a processor for directing said switching circuit to perform unscheduled pre-emptive cut through routing of a communication path probe utilized to establish a communication path for communicating non-time sensitive information, wherein said information is dropped if said unscheduled pre-emptive cut through routing is not performed directly, said processor coupled to said switching circuit; and

a memory for storing information associated with the control of said switching circuit by said processor, said memory coupled to said processor.

56. (Previously Presented) The network management system of Claim 55 wherein said processor directs said switching circuit in the performance of a time sensitive quality of service management method comprising:

receiving information by an intermediate network device;

determining transmission timing constraints of said intermediate network device;

sending the information to downstream devices by the intermediate network device via unscheduled pre-emptive cut through routing only, if the intermediate device is available for sending information to downstream devices within specified timing constraints;

analyzing the timing constraints of the information by the intermediate network device; and

dropping the information if the intermediate device is not available for sending to downstream devices within specified timing constraints directly via said unscheduled cut through routing.

57. (Previously Presented) The network management system of Claim 55 wherein dropped information is resent from an originating device.

58. (Previously Presented) The network management system of Claim 55 wherein a packet of information is switched to the down stream channels as soon the header indicating the timing constraints of the information is received and analyzed.

59. (Previously Presented) The network management system of Claim 55 wherein the information is considered urgent if it is addressed to a port associated with a real time device.